



MAR 11 1993

March 5, 1993

Ms. Lynda Wedderspoon
Agency of Natural Resources
Department of Environmental Conservation
Sites Management Section
103 South Main Street/West Building
Waterbury, Vermont 05671-0404

Re: Test Borings and Groundwater Monitoring Well Installation, Gordon Clow Property, 11 The Green, Woodstock, Vermont.

Dear Ms. Wedderspoon:

C.A.B. Services, Inc. has completed the revised scope of services for the above referenced project. The revised scope of services included the drilling of three test borings (TB), the installation of one groundwater monitoring well, field analyses of split spoon soil samples and laboratory analysis of one groundwater sample. The following report provides a summary of our field work and analytical results.

TEST BORINGS/FIELD ANALYSIS

On January 27, 1993, 1993, C.A.B. Services, Inc. and Great Works Test Borings, Inc. (GWTB) performed the drilling of three test borings (TB) at the subject site. Split spoon soil samples were collected, at five (5) foot intervals, from two of these borings (MW1 and TB2). Soil samples were field analyzed with a Photovac MicroTIP OVM/PID to detect the presence of petroleum related VOC's. OVM/PID readings follow:

SAMPLE NUMBER	DEPTH (ft.)	OVM/PID READING (ppm)
<u>MW1:</u>		
S-1	4.5 - 6.5	2.9
S-2	9.5 - 11.5	1.7
S-3	13 - 15	1.6
S-4	19.5 - 21.5	1.8
<u>TB2:</u>		
S-1	4.5 - 6.5	2.0
S-2	9.5 - 11.5	1.7
S-3	13.5 - 15.5	1.1
<u>TB3:</u>		
No Samples	Augered to refusal @ 13'	Augered to refusal @ 13'

Refusal was encountered at approximately 13' at TB2 and TB3. The boring logs have been enclosed. Boring locations are shown on the attached Groundwater Monitoring Well and Test Boring Locations Plan.

Environmental Evaluations

Tanks - Cleaning, Removal and Disposal Spills - Cleanup, Prevention
Ground Water Recovery and Monitoring Pumping - Liquids and Solids

If you have a problem we're here to help

P.O. BOX 8, DOVER, NH 03820 - TWENTY-FOUR HOUR SERVICES (603) 749-6355

GROUNDWATER MONITORING WELL INSTALLATION

On January 27, 1993, Great Works Test Borings, Inc. installed one groundwater monitoring well at the subject site (MW1). This well was installed to a depth of approximately 25' below surface grade. Upon completion of monitoring well installation, the well was manually bailed to remove sediment and turbidity. No floating product or visible sheen was observed in this well.

GROUNDWATER ANALYSES

On February 9, 1993, C.A.B. Services, Inc. returned to collect a groundwater sample from MW1. A minimum of three (3) to five (5) volumes of water were manually bailed from this well prior to sampling. No floating product or visible sheen was observed at the time of sampling. The sample was placed in replicate 40 ml. sterile vials with septum closures for analysis. The sample was kept refrigerated and Chain-of-Custody was maintained. The sample was delivered to the Analytics Environmental Laboratory, Inc. in Portsmouth, New Hampshire for analysis. The laboratory analysis was completed on February 17, 1993 and the analytical result was received at our office on February 26, 1993.

The sample was analyzed by EPA Method 602 for detection of petroleum related volatile organic compounds (VOC's). The analysis did not detect the presence of petroleum related VOC's above the minimum analytical detection limit of 5 ug/L (micrograms per Liter). The Analytics Environmental Laboratory, Inc. report has been enclosed.

CONCLUSIONS

1. Field analyses of split spoon soil samples detected <3.0 ppm of petroleum related VOC's.
2. Refusal was encountered in two of three borings at an approximate depth of 13' below surface grade.
3. No floating product or visible sheen was observed in MW1. Laboratory analysis of the groundwater sample from MW1 did not detect the presence of petroleum related VOC's above the minimum analytical detection limit of 5 ug/L.

RECOMMENDATIONS

-A second round sample/laboratory analysis of MW1 in approximately six months to confirm our initial findings.

Please call our office if we can provide any additional assistance. Thank you for allowing C.A.B. Services, Inc. the opportunity to provide these services.

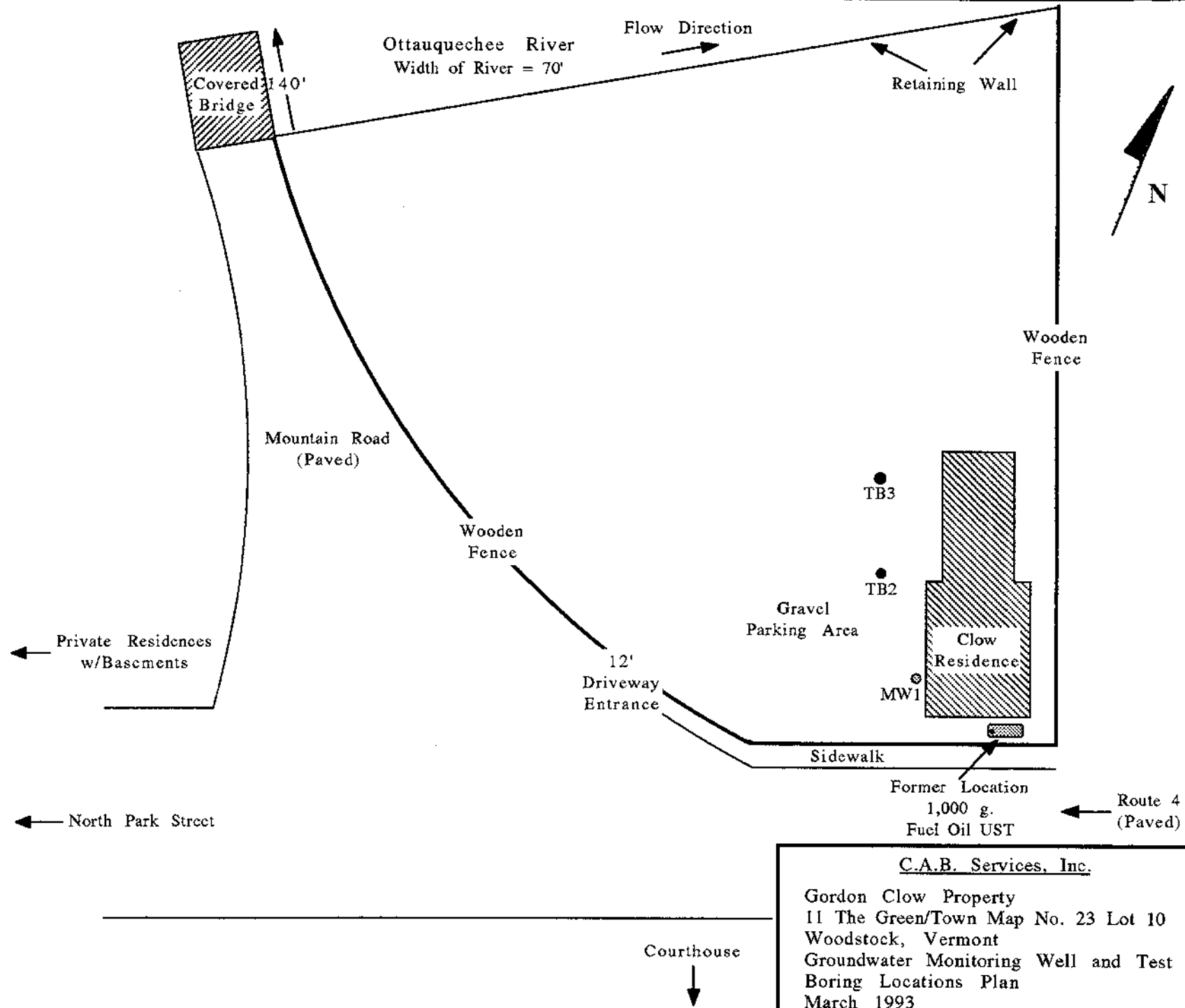
Cordially,



Al Bryant

Encl: GW Monitoring Well and Test Boring Location Plan
Laboratory Analyses
Boring Logs

cc: Mr. Gordon Clow
11 The Green
Woodstock, Vermont 05091



C.A.B. Services, Inc.
Gordon Clow Property
11 The Green/Town Map No. 23 Lot 10
Woodstock, Vermont
Groundwater Monitoring Well and Test
Boring Locations Plan
March 1993
Approximate Scale: 1" = 40'

FEB 26 1993



environmental
laboratory inc.

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111

Mr. Bruce Bentham
C. A. B. Services, Inc.
P. O. Box 8
Dover, NH 03820

February 22, 1993

Re: Clow Woodstock, VT

Enclosed are the results of the analyses on your sample(s). Please see individual reports for specific methodologies and references.

If you have any further questions on the analytical methods or these results, do not hesitate to call.

<u>Lab Number</u>	<u>Sample Date</u>	<u>Station Location</u>	<u>Analysis</u>	<u>Remarks</u>
30764-01	2/9/93	MW1	EPA 602	

Analytics Environmental Laboratory is certified by the states of New Hampshire, Maine, Massachusetts and Florida. A list of actual certified tests is available upon request.

Authorized signature

A handwritten signature in dark ink, appearing to read "Kenneth W. Teague", written over a horizontal line.

Kenneth W. Teague, President

A handwritten mark or initials, possibly "E", enclosed within a circular outline.



environmental
laboratory inc.

195 Commerce Way
Portsmouth, New Hampshire 03801
603-436-5111

Mr. Bruce Bentham
C. A. B. Services, Inc.
P. O. Box 8
Dover, NH 03820

February 20, 1993

CLIENT SAMPLE ID
Client Project: Clow Woodstock, VT

Project Number:
Station ID: MW1

SAMPLE DATA

Lab #: 30764-01
Matrix: Water
Percent Solid: N/A
Dilution Factor: 1
Collection Date: 2/9/93
Lab Receipt Date: 2/12/93
Analysis Date: 2/17/93

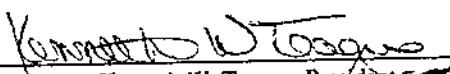
ANALYTICAL RESULTS PURGEABLE AROMATICS

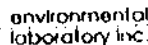
COMPOUND	Detection Limit: µg/L	Result: µg/L
Benzene	5	ND
Toluene	5	ND
Ethylbenzene	5	ND
m-Xylene	5	ND
o&p-Xylene	5	ND
Methyl t-butyl ether	5	ND
<u>Surrogate Standard Recovery</u>		
d4-1,2-Dichloroethane		86%
d8-Toluene		99%
Bromofluorobenzene		99%
ND=None Detected <=Less than >=Greater than PR=Present but not calibrated for		

METHODOLOGY: Water sample analysis was conducted according to "40 CFR Part 136, Modified EPA Method 624" and other matrices were analyzed according to "Test Methods for Evaluating Solid Waste, Modified SW-846 Method 8240."

COMMENTS:

Authorized signature


Kenneth W. Teague, President



195 Commerce Way
Portsmouth, NH 03801
Phone: (603) 436-5111
Fax: (603) 436-0154

Matrix Key:

W= Water
S= Soil /Sludge
O= Oil
E= Extract
X= Other

Preservation:

1= Ice
2= H₂SO₄
3= HNO₃
4= HCl
5= Other

For Analytics use only:

Samples were:

1) Shipped or Hand delivered
2) Ambient or Chilled
3) Received in good condition:
Y or N

4). Properly preserved:

Y or N

5) Received within hold time:

Y. OF N

Proj #:

Proj Name: Cash Woodstock VT.

Company: C.A.B. Services, Inc.

Contact: Bruce Bentham/Al Bryant

Address: p. O. Box 8 Dover, New Hampshire 03820

Phone: 749-6355

Fax: 664-5314

P.O. #:

Sampler(Signature):

[illegible]

Comments/Instructions:

Page 1 of 1

TURNAROUND REQUEST

Standard

Priority (Surcharge)

Revisions:

Date _____ Initials _____

Date	Initials
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11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Reinquired by:	Date:	Time:	Received by:
Mr. B. J. B. B.	2/12/93	10:15	Mr. B. J. B. B.

Received for lab. ov:

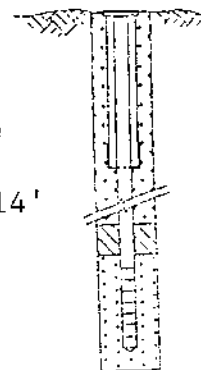
2/12/93 930

FEB 08 1993

TEST BORING LOG

Boring No. MW-1 Sheet 1 of 3
Project Clow Residence Location Woodstock, Vt. Client CAB
Date Started 1/28/93 Completed 1/28/93
Surface Elev. _____ Ground Water 17' approx.
N - No. of Blows to Drive 2" Sampler 6" w/140 LB. Weight Falling 30"
C - No. of Blows to Drive _____ Casing 12" w/300 LB. Weight Falling 24"

Depth (Ft.)	C.	N.	Spl No.	Sample Depth	Description of Material
		9-20-12-11	1	4.5'-6.5'	13" Rec. Br. Fine/Med. sand with rock frag. (Dry)
		11-18-17-25	2	9.5'-11.5'	13" Rec. Br. Fine/Med. sand with some Course gravel. (Dry)
		15-25-39-39	3	14.5'-16.5'	14" Rec. Br. Course sand with stone. (Dry)
		3-3-6-6	4	19.5'-21.5'	18" Rec. Olive sandy silt. (Wet)
25'					Bottom of boring.
					Cement cap. Backfill to surface Top of bentonite 13' Top of filter sand 14' Top of screen 15' Well point at 25'



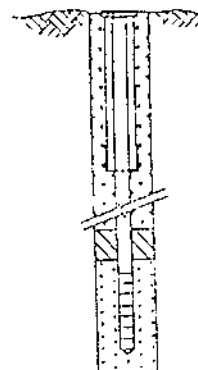
GREAT WORKS TEST BORING, INC
P.O. BOX 491, MAIN STREET
ROLLINSFORD, NEW HAMPSHIRE
(207) 384-5350 or (603) 664-5248

FEB 8 1988

TEST BORING LOG

Boring No. TB-2 Sheet 2 of 3
Project _____ Location _____ Client _____
Date Started _____ Completed _____
Surface Elev. _____ Ground Water _____
N - No. of Blows to Drive 2" Sampler 6" w/140 LB. Weight Falling 30"
C - No. of Blows to Drive _____ Casing 12" w/300 LB. Weight Falling 24"

Depth (Ft.)	C.	N.	Spl No.	Sample Depth	Description of Material
		2-1-3-7	1	4.5'-6.5'	18" Rec. Br. Fine/Course sand. (Dry)
		14-9-13-19	2	9.5'-11.5'	14" Rec. Br. Course sand with rock frag. (Dry)
13'					Auger refusal.
					No Well.



GREAT WORKS TEST BORING, INC
P.O. BOX 491, MAIN STREET
ROLLINSFORD, NEW HAMPSHIRE
(207) 384-5350 or (603) 664-5248

TEST BORING LOG

Boring No. TB-3 _____ Sheet 3 of 3
 Project _____ Location _____ Client _____
 Date Started _____ Completed _____
 Surface Elev. _____ Ground Water _____
 N - No. of Blows to Drive 2" Sampler 6" w/140 LB. Weight Falling 30"
 C - No. of Blows to Drive _____ Casing 12" w/300 LB. Weight Falling 24"

Depth (Ft.)	C.	N.	Spl No.	Sample Depth	Description of Material
12.6'					Tried to auger to 15' to start sampling but had auger refusal at 12.6'. 2" piece of Granite came up in spoon.

